

REMARKS

This is in response to the Office Action of November 5, 2007. Claim 1 is amended, based upon such disclosure as that in the first paragraph on page 5 of the specification (“multifilaments that have a flat shape without twists”) and in the paragraph bridging pages 6-7 of the specification (“composite fibers having a core-sheath structure in which the sheath portion is formed by a polymer having a lower melting point than that of the core portion” and “support fiber member is flattened by thermo-compression”) and in the paragraph bridging pages 8-9 of the specification (“carbon fibers, glass fibers, boron fibers, steel fibers”). Claim 2 is amended based upon such disclosure as that in the paragraph bridging pages 8-9 of the specification. New claim 14 is based on original claim 4. New claim 15 is based on original claim 6. No new matter is introduced by this Amendment. With this Amendment, claims 1, 2, 5, and 7-15 as amended are before the Examiner for reconsideration.

Claims 1, 2, 5, and 7-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US 2001/0006866 A1 (Kuroiwa) in view of US 6,641,763 B2 (Nakamura). Office Action, pages 2-3. It is respectfully submitted that this ground of rejection does not apply to claims 1, 2, 5, and 7-15 as they are currently pending in the application.

Kuroiwa discloses a multi-axially laminated nonwoven fabric, and does not disclose that reinforcing fiber yarns are formed in to a sheet shape by using a support fibrous member as in the present invention. The Kuroiwa disclosure does not relate to a reinforcing nonwoven base fabric using reinforcing fibers yarns. Kuroiwa fails to disclose, for instance, that carbon fibers, glass fibers, boron fibers, or steel fibers may be used, much less that they may be used in the form of multifilaments which form a flat shape without twists.

Nakamura merely discloses fibrous aggregates, and does not disclose that reinforcing fiber yarns may be formed into a sheet shape by using a support fibrous member as in the present invention. The Nakamura disclosure does not relate to fibrous aggregates using reinforcing fiber yarns. Nakamura likewise fails to suggest that carbon fibers, glass fibers, boron fibers, or steel

fibers may be used in any form, much less that they may be used in the form of multifilaments which form a flat shape without twists.

The present invention solves the problem of how to form high strength fibers – such as carbon fibers, glass fibers, boron fibers, and steel fibers – into a flat shape. None of the cited references is concerned with this problem.

Applicants have discovered that in order to form high strength fibers, such as carbon fibers, glass fibers, boron fibers, and steel fibers, into a flat shape, it is important to combine (a) the carbon fibers, glass fibers, boron fibers, and steel fibers as multifilaments that form a flat shape without twists with (b) a support fibrous member formed of multifilament yarn that is made of polyolefin composite fibers having a core-sheath structure in which the sheath portion is formed by a polymer having a lower melting point than that of the core portion. None of the cited references discloses this inventive combination.

Withdrawal of the rejection of record is in order and is earnestly solicited. If there are any questions concerning the present application, the Examiner is respectfully requested to contact Richard Gallagher (Reg. No. 28,781) at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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